Environment Canada Environnement Canada

The Right to a Healthy Environment

An Overview of the Proposed Environmental Protection Act

The Honourable Tom McMillan
Minister of the Environment

Canada

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INTRODUCTION

Chemical residues are everywhere: in our homes, offices and factories; in cities, on farms, in wilderness areas far removed from the sources of contamination. They are present in the food we eat, the water we drink and the air we breathe. Some, like atmospheric lead, are believed to affect the mental development of our children. Others, like those in acid rain, are relentlessly eroding the environmental systems we depend upon for our very existence.

The fact that most human beings have detectable levels of synthetic chemicals in their bodies is evidence of our collective carelessness in using them. In his Report Card on the environment in 1986, Environment Minister Tom McMillan gave Canada an "F" for its ability to handle toxic substances.

The search for a better way of handling toxic chemicals is driven by both our knowledge and our ignorance. Technology can detect a few parts of toxic chemicals per billion in living tissue but it cannot yet assess, except in a few cases, the long-term effect of these low concentrations. While we know, in general terms, a great deal about the mechanisms and pathways by which toxic chemicals move through air, water and land, we cannot yet predict their ultimate fate in the environment.

If the need for control is clear, the means are not. There is a built-in reluctance to ban or control chemicals because, directly or indirectly, they give us more jobs, more food, warmer dwellings and better clothing than we would otherwise have. A great deal of our industrial strength and economic progress is based upon the use of chemicals, often very toxic ones.

Estimates vary but it is commonly believed that there are up to 100,000 chemicals in commercial use throughout the world, with roughly 1,000 new ones entering the market every year. Only a fraction of these are believed to be hazardous but few have been assessed to make sure.

New chemicals are introduced under two assumptions: first that they are safe until proven dangerous; second, that the means to isolate them from people or the environment are adequate. The mention of a few chemicals -- DDT, dioxin, PCBs -- or a few place names -- Bhopal, the Love Canal, the Rhine River -- demonstrates that those assumptions are not always well-founded.

Until the publication of Rachael Carson's "Silent Spring" in the 1960s, it was generally believed that toxic substances could be safely dispersed in the environment. "Silent Spring" argued that DDT, while it temporarily protected crops from insects, led eventually to DDT-resistant pests that destroyed the birds that fed upon them. The book led to the banning of DDT in North

America. Only recently, however, has it been realized that the way DDT works in the environment is not an isolated case but a general principle.

Traditionally, governments have been concerned with pollution that could be seen, touched, smelled or tasted. Industrial waste was sometimes an eyesore, an assault upon our appreciation of nature; but it was not conceived to be a threat to human health or life. Nor was it perceived to be capable of rendering the environment incapable of sustaining life. Governments responded, usually, by imposing technological remedies. Offending discharges or effluents were recovered, treated or contained. The emphasis was on cleaning up a mess after it occurred.

Toxic chemical contamination cannot be handled in this way. Ordinary sense perception cannot identify chemical contamination because it is usually invisible until the damage, sometimes irreparable damage, has been done. Since chemical pollution exists at the molecular level, it cannot usually be treated, contained or recovered from the environment. And since its effects are pervasive and long term, rather than local or immediate, quick-fix measures are not practical.

The traditional way, seeking a solution after the fact, is no longer good enough. The challenge is not to find another technological "fix" but to prevent chemicals from escaping into the environment in the first place. This is the overall objective of a new framework for managing new toxic chemicals proposed by Environment Minister Tom McMillan; a framework that calls for changes in legislation, in environmental policy and in the day-to-day management of toxic chemicals in Canada.

THE PROBLEM

Policy and Administration

As with many other issues in Canada, the management of toxic chemicals is complicated by the fact that responsibility for environmental protection is split between the provincial and federal governments.

At the federal level alone, 24 departments administer a total of 58 Acts of Parliament dealing with various aspects of the control of hazardous substances. A review by the Canadian Council of Resource and Environment Ministers in 1983 identified 30 federal and 97 provincial Acts that applied to only 10 areas of toxic chemicals.

Many of these Acts, and the regulations related to them, were developed piecemeal, in response to problems as they emerged. Different stages of a chemical's life cycle were, therefore, addressed in isolation.

As well, the system contains duplication and areas of overlapping jurisdiction, that make it difficult for industry to comply with regulations. There are varying levels of protection across the country. Worse there are gaps in the network which

make it difficult for governments to come firmly to grips with certain types of toxic chemicals.

This unwieldy legislative and administrative structure has prevented the development of a clear policy on toxic chemicals in Canada. There has been no broad direction to the national environmental protection effort. As a result, the federal government's goals and priorities lack clear definition. And the responsibilities of the stakeholders -- labour, industry, environmental groups and the general public, as well as government -- have never been specified.

Legislation

The key piece of existing federal legislation dealing with toxic chemicals is the Environmental Contaminants Act (ECA). This law allows for the regulation of chemicals principally as they relate to commercial importing, manufacturing and processing. Among other things, it requires manufacturers and importers to notify the Department of the Environment when chemicals are introduced into the country. The Act applies only when consultation with other authorities shows that they are not empowered to, or are unable to, exercise control over toxic chemicals.

Control is exercised through a "schedule" or list of prescribed chemicals, along with regulations appended to the Act. The regulations stipulate, among other things, the quantities, the concentrations and the conditions under which the entry of toxic chemicals is acceptable. Those who fail to comply with the regulations are liable to fines of up to $100,000 or to imprisonment for up to two years.

Under the ECA, the Minister of the Environment or the Minister of National Health and Welfare may add a chemical to the schedule after consulting with provinces and other federal agencies to determine whether control action is being, or will be, taken under any other law.

Interested parties who object to proposed regulations, or to the proposed scheduling of a substance, may file a notice of objection with the Minister of the Environment. The Minister is then required to establish a board of review to hold hearings and issue a report. Except in emergency situations, the government cannot proceed with regulatory action until the report is received.

Companies that manufacture or import a chemical compound for the first time in excess of 500 kg a year are required to notify the Department of the Environment. The notification must identify the chemical compound, the quantity produced or

imported, and any information the company has regarding the danger posed by the chemical.

When the Ministers suspect that a chemical may be dangerous they are empowered to test and investigate the chemical within their departments. If they have reason to believe that the chemical is entering, or will enter, the environment in a quantity or concentration that constitutes a significant danger to human health or the environment, they can call for information and require testing of the chemical by industry. Unfortunately, in only a few cases has it been possible for the Ministers to exercise this latter power.

In principle, these notification and information-gathering provisions of the ECA appear to give the Ministers necessary authority to deal with chemicals that may pose significant health or environmental risks. In reality, however, they have been found inadequate on three grounds.

First, the notification requirements for new chemicals do not provide government with enough information to evaluate the chemical. The ECA calls upon industry only to identify chemicals introduced into Canada and to reveal the quantity involved. Furthermore, the notification is required only after the chemical is already in use. There is no systematic or automatic procedure to screen chemicals for toxic effects before they are introduced in Canada.

Second, the Ministers' information-gathering powers are confined to "commercial" operations exempting institutional, scientific and other activities which can also be sources of toxic chemicals.

Third, the "reason to believe" provision imposes a "Catch-22" limitation on the Ministers' authority to require testing of chemicals by manufacturers and importers. In practice, this provision means that unless the government already has assessed test data that it has generated itself or has obtained from other sources, the Ministers cannot compel a manufacturer or importer to submit the data required for an assessment. Consequently, very few chemicals have been assessed and, subsequently, regulated.

Perhaps the greatest flaw in the Act is that it places responsibility in the wrong place and at the wrong time. Today, government must demonstrate that a substance already on the market is harmful to human health and the environment. In the light of experience over many years, this is the wrong way around. The onus should be on industry to demonstrate that any new chemical is safe; not on the government to prove that it is dangerous. The time for these decisions is before, not after, a chemical enters the market.

ELEMENTS OF A SOLUTION

Life-cycle Management

As part of an ongoing review of the toxic chemicals issue, Environment Canada and Health and Welfare Canada convened, in 1985, two task forces composed of representatives of industries and industry associations, environmental groups, federal and provincial governments, labour and other concerned groups and individuals.

The first was designed to find a solution to the toxic chemicals issue that would minimize the risks to human health and the environment, while supporting industrial productivity and competitiveness. The task force recognized a fundamental linkage between economic progress and the quality of the environment and the hidden costs of chemical pollution, beginning with cleanup, litigation, insurance and compensation costs for the companies involved. But the task force also found a deeper confluence of interests, noting that whatever diminishes the environment ultimately reduces the economic opportunities of society as a whole.

This task force's report, "From Cradle-to-Grave: A Management Approach to Chemicals", endorsed a new management approach that would control chemicals from their initial development to their

ultimate disposal - from cradle to grave. This approach would allow all the stakeholders to track a chemical throughout its life cycle, helping to predict where and when people, or the environment, may be exposed to toxic chemicals. This would enable governments and industry to identify potential problems and prevent them from occurring.

Since no stakeholder can decide alone how the environment should be simultaneously used and protected, the task force recommended a system of widespread and regular consultations, involving all the key players. It was clearly recognized that environmental concern had to be "plugged in" not after the fact but at the very earliest stages of economic planning and decision making.

The second task force undertook a thorough review of the Environmental Contaminants Act and the proposals to revamp the Act to make it more effective in addressing toxic chemicals problems. As outlined in their report, "Final Report of the Environmental Contaminants Act Consultative Committee", this group designed a package of standard tests and procedures to assess the human health and environmental impact of new chemicals, to be used before they are allowed on the market. In addition, the task force recommended inclusion of broader powers in the Act to deal with the problems associated with chemicals already in use in Canada.

The two reports of the task forces have been published and are available.

ENVIRONMENTAL PROTECTION ACT

The new Environmental Protection Act (EPA) proposed today, modernizes and clarifies federal environmental legislation, providing for greater consultation between federal departments, between the federal and provincial governments and between governments and the private sector.

The scope of the proposed EPA would be much wider than the existing ECA, covering all chemicals which are new to Canada, whether commercial or non-commercial. The Act would allow for regulating such chemicals at seven distinct stages in the life cycle:

-- research and development,
-- introduction,
-- manufacturing,
-- transportation,
-- distribution,
-- use, and
-- disposal.

The EPA would provide a framework within which the Department of the Environment, in concert with other federal departments, provincial and territorial governments, industry, labour,

environmental groups and the general public, can identify options and implement programs to reduce the exposure at each stage.

Chemicals which are banned or restricted in the Environmental Contaminants Act will continue to be so controlled in the proposed Environmental Protection Act. Under the new legislation, industry would also be required to:

1) notify the Minister of the Environment before any chemical is introduced into Canada, and

2) submit a "data package" on such chemicals, describing their properties and providing sufficient information to enable health and environmental impact assessment, along with information on where and how they will be used.

The content of the data packages and the testing procedures that will be used to assess any new chemical will be specified in the regulations. The basic form of the packages has already been worked out in cooperation with industry, labour, environmental groups and provincial governments.

Thus, at the notification stage, well before any new chemical can be introduced into Canada, the government would have the information required to:

-- ban the chemical, if necessary;

-- permit entry of the chemical, subject to conditions; or

-- require further testing of the chemical to assess the potential danger to human health and life or to the environment.

The Environmental Protection Act, like the Environmental Contaminants Act, will operate through the listing of chemicals. There would be four "schedules" attached to the new Act which would identify chemicals for the purposes of regulation.

The first schedule would list all the chemicals now in use in Canada. The list would identify those chemicals for which industry is not required to notify the Minister of the Environment or submit a data package.

The second schedule would list all chemicals known to exist in the world but not yet used in Canada. Should anyone wish to introduce chemicals on this list into Canada, they would be required to notify the Minister of the Environment of their intention and submit a prescribed data package.

For totally new chemicals, which do not appear on either list, the new Act would require notification and the most stringent data package.

A third schedule would list chemicals that are banned or severely restricted by federal legislation. The new Act would require Canadian firms exporting such chemicals to notify an authority in the countries to which the chemicals are to be exported.

Finally, there would be a schedule of dangerous chemicals which are subject to regulation under the EPA.

MAJOR PROVISIONS

The preamble to the proposed Environmental Protection Act states that pollution jeopardizes the life and health of the people of Canada and the environment on which human life depends. It acknowledges the right of Canadians to a healthy environment and commits the federal government to cooperate with provincial and territorial governments, in consultation with all Canadians, to protect and enhance the environment.

The preamble stipulates that the federal government will take a leadership role in the establishment of national standards of environmental quality, and in the promotiong of "a social and economic climate" in which environmental concerns will have a fundamental place in economic decision-making. The preamble also states that the government will report to the people of Canada on the state of their natural environment.

The proposed Act has six major components:

-- a new approach to control all aspects of the life cycle of toxic chemicals;

-- the establishment of regulations to protect federal lands and waters;

-- the establishment of guidelines so that other federal ministers can use the Act to establish environmental requirements for federal lands, works, undertakings and businesses.

-- the establishment of national environmental guidelines and objectives related to desirable levels of environmental quality and to environmentally-sound commercial or industrial practices;

-- control of sources of atmospheric pollution in Canada that are likely to affect another country or violate international agreements; and

-- control of nutrients in cleaning or water-conditioning products, such as phosphates, which promote the growth of aquatic vegetation and thus disturb the balance of nature.

The new Act would repeal the Environmental Contaminants Act and the Clean Air Act, as well as Part III of the Canada Water Act and a part of the Department of the Environment Act. The new legislation will be subject to the Access to Information Act, while providing safeguards for confidential business information and proprietary information.

The new Act would also contain new provisions dealing with federal lands, waters, works and undertakings. Section 6(2) of the Department of the Environment Act, dealing with the environmental protection by federal departments, agencies and corporations, would be transferred to the new Act. As well, there would be a new provision, empowering the government to establish regulations for the environmental protection of those federal lands, waters and undertakings under federal jurisdiction.

The authority of the Minister to develop regulations and national environmental quality guidelines would be upgraded under the new Act. The Clean Air Act, within limits, allows the government to set national environmental guidelines and objectives for ambient air quality and for the emission of chemicals into the air. The new Act would allow for similar control of discharges to water, land and any part of the environment. These guidelines and objectives would be developed in cooperation with provincial and territorial governments, as the basis for regulation by each level of government.

The following provisions governing toxic chemicals in the new Act represent major changes from the Environmental Contaminants Act.

Chemicals New to Canada

The Act would provide that anyone introducing a chemical into Canada would be required to so notify the Minister. This notice would have to be filed before, not after, the chemical is imported or manufactured.

"Reason to believe"

The "reason to believe" limitation on authority to require testing by manufacturers or importers will be removed.

The wording in the new Act would be changed to a "reason to suspect", allowing the Ministers to compel manufacturers and importers to provide sufficient data to assess the potential hazard and, if necessary, control the chemical.

Powers of Inspectors

The ECA provides for the appointment and training of environmental inspectors within the Department of the Environment. The new Act would provide these inspectors with additional powers to take samples and measurements during an inspection of any facility in order to ensure compliance with the Act. The government would be empowered to take corrective measures after an investigation.

Recall Power

The new Act would give the Minister of the Environment the power to order recalls of chemicals or products distributed in contravention of the Act. A recall could be ordered, for example, if manufacturers fail to notify the government of their intention to introduce a chemical into Canada. This provision would include the power to require the polluter to publicize the recall order, and to compel offenders to repurchase or replace the chemical or product.

Clean-up

Under the ECA, there are no powers to compel polluters to clean up controlled chemicals released into the environment. The new legislation would provide the Minister with this authority. If

the polluter fails to comply with such an order, the government will have authority to take remedial action and recover costs from the polluter.

Export Notification

A new provision would require anyone exporting, for the first time, a substance that is banned or severely restricted in Canada, to notify a national authority in the country of destination. A copy of the notification would be sent to the Canadian government and may be published in the Canada Gazette. The notice would identify the chemical, the name of the exporter and the country to which it is going. The purpose of this notice is to assist importing governments in the regulation of these substances.

This provision would allow Canada to meet its obligations as a member of the United Nations Environment Program and the Organization for Economic Cooperation and Development. Canada will benefit from equivalent notification from other participating nations, giving the government advance warning when potentially dangerous chemicals are entering Canada.

Offences

In addition to a number of offences set out in the ECA, the new legislation introduces the following: failure to provide the

Minister with requested or required information; failure to notify the Minister when a chemical, previously considered harmless, is found to be dangerous; failure to perform tests or take measurements; fraudulent testing; and fraudulent reporting on testing.

Penalties

The ECA provides fines of up to $100,000 and two years' imprisonment while the Clean Air Act provides a maximum fine of $200,000. The new maximum penalty would be set at $1,000,000 and five years' imprisonment. As in the current legislation, each day a prohibited activity continues would be considered a separate offence.

SUMMARY

The proposed Environmental Protection Act will give the federal government broad new powers to manage toxic chemicals and minimize further contamination of the environment.

Released jointly by Environment Minister Tom McMillan and National Health and Welfare Minister Jake Epp, the draft Bill would increase penalties for polluters improve ways for the victims of pollution to seek redress in the courts and introduce a comprehensive regulatory scheme allowing the government to either ban toxic chemicals before they enter Canada or control them throughout their life cycles.

It is being released for discussion with other governments, environmental groups, industry, labour and the general public. Following this, the bill will be fine-tuned and presented to Parliament.

In a sharp departure from current practice, the new Act will require industry to provide government with the necessary test data and information required to evaluate chemicals that are new to Canada. This will enable the government to anticipate environmental problems and thus prevent them from occurring in the first place.

The government would be given new authorities to inspect, take samples and seize chemicals to ensure compliance with the new legislation. The government would also gain the power to temporarily halt any action which might result in chemical pollution of the environment. The Minister of the Environment would be given new powers to order the recall of dangerous chemicals or products containing dangerous chemicals. Jail sentences of up to five years and fines of up to $1,000,000 could be imposed under the new Environmental Protection Act.

Provisions now found in the Environmental Contaminants Act, the Canada Water Act, the Clean Air Act and the Department of the Environment Act would be consolidated in the new legislation. The new Act thus provides industry with a single source of control, streamlining the reporting requirements and reducing the regulatory burden.

By requiring exporters to notify foreign governments when they intend to export banned or severely restricted toxic chemicals, the new Act would allow Canada to meet its obligations as a member of the United Nations Environment Program and the Organization for Economic Cooperation and Development.

The new EPA provides a mechanism to regulate federal government works, undertakings and businesses wherever other legislation fails to do so. As well, it allows the Minister of the Environment and other ministers to cooperatively set up regulations to protect federal lands and waters from pollution.

Stronger powers, the life-cycle approach, tougher penalties, and a clarified commitment to set national standards will provide an integrated, cooperative and above all, a preventive approach to the problem of toxic chemical pollution in Canada. The new powers will assure all Canadians the fundamental right to a safe, healthy environment.